

SECTION 13000

BORROW AREA MANAGEMENT

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes on-site soil borrow area management, including maintenance and restoration.

1.02 RELATED SECTIONS AND PLANS

- A. Section 02110 - Clearing, Grubbing and Stripping
- B. Section 02230 - Road Construction
- C. Section 02270 - Erosion and Sediment Control
- D. Section 02721 - Culverts
- E. Section 02930 - Vegetation
- F. Surface-Water Management and Erosion Control (SWMEC) Plan, Revision 0, May 1997.
- G. Borrow Area Management and Restoration (BAMR) Plan, Revision 0, May 1997.
- H. Part 6 - Statement of Work
- I. Part 8 - Environmental Health and Safety, and Training Requirements
- J. Part 9 - Quality Assurance Requirements

1.03 REFERENCES

- A. Latest version of Ohio Department of Transportation Construction and Material Specifications (Ohio DOT Specifications).

1.04 SUBMITTALS

- A. Prepare and submit a Contractor Borrow Area Management and Restoration Plan to the Construction Manager within 30 calendar days from Notice to Proceed, that meets the requirements of the Borrow Area Management and Restoration reference plan identified in this Section. Organize the Contractor Borrow Area Management and Restoration Plan to include, at a minimum including :
1. methods for implementing surface-water management controls and erosion and sediment controls, including sedimentation basins (if applicable);
 2. locations and construction detail sketches for haul roads within the borrow area and proposed surfacing on such haul roads;
 3. design of haul road(s) from borrow area to the On-Site Disposal Facility (OSDF) construction area to include final alignment and cross-section;
 4. location of road crossing and proposed traffic control measures;
 5. locations for stockpiling cleared, grubbed, and stripped materials;
 6. locations for stockpiling materials suitable for compacted clay liner and cap construction, compacted fill construction, topsoil, clayey rockfill, and other unsuitable materials;
 7. proposed method for differentiating and managing borrow materials suitable for different uses, including compacted clay liner and cap, compacted fill, vegetative soil layer, and topsoil;
 8. plan for incremental development and restoration of the borrow area;
 9. plan for maintaining and cleaning the sedimentation basin; and
 10. an explanation for proposed deviations from the Borrow Area Management and Restoration reference plan
- B. Provide a list of equipment and description of construction methods in the Earthwork Work Plan specified in Section 02200.

1.05 HEALTH AND SAFETY REQUIREMENTS

- A. Environmental, health and safety, and other training requirements shall be as specified in Part 8 of the Contract Documents.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Roadway subbase and base material, and separator geotextile, shall meet the requirements of Sections 02230 and 2714.
- B. Reinforced concrete pipe (RCP) circular or box culverts and corrugated metal pipe (CMP) culverts shall meet the requirements of Section 02721.

2.02 EQUIPMENT

- A. Furnish equipment to develop, manage, and restore the borrow area.

PART 3 EXECUTION

3.01 GENERAL

- A. Perform borrow area management in accordance with this Section, the Construction Drawings, and the Borrow Area Management and Restoration Plan prepared by the Contractor and approved by the Construction Manager.
- B. Dust control shall be as specified in Part 6 of the Contract Documents.

3.02 EROSION AND SEDIMENT CONTROL

- A. The sedimentation basin outlet structures will be constructed by others and may not be available until the second year of borrow area operation.
- B. Construct sumps and temporary sediment traps to control runoff during the first year of borrow area operation.
- C. Implement and maintain surface-water management controls and erosion and sediment controls in accordance with the Construction Drawings and Section 02270.

3.03 BORROW AREA MANAGEMENT

- A. Manage the borrow area within limits indicated on the Construction Drawings.

- B. Perform clearing, grubbing, and stripping in the borrow area in accordance with Section 02110.
- C. Perform borrow area management in accordance with the Borrow Area Management and Restoration Plan.
- D. Do not excavate beyond borrow area limits shown on the Construction Drawings unless otherwise directed by the Construction Manager.
- E. Revegetate the borrow area in accordance with Section 02930.

3.04 QUALITY CONTROL REQUIREMENTS

- A. The CQC Consultant will perform conformance testing of materials Contractor proposes to excavate from the borrow area. Identify these materials at least 15 calendar days prior to the anticipated excavation date to provide the CQC Consultant time to perform conformance testing. Use the conformance test results to differentiate borrow materials. Conformance testing to be performed and testing frequencies are given in the Construction Quality Assurance (CQA) Plan, referenced in Part 9 of the Contract Documents. CQC Consultant will perform conformance testing at a greater frequency if necessary to differentiate borrow materials.
- B. Throughout borrow operations, provide equipment and labor as needed to assist the CQC Consultant in obtaining material conformance samples from borrow locations.

3.05 TRAFFIC CONTROLS - BORROW AREA

- A. Traffic shall not exceed the site speed limit of 10 mph.
- B. Loaded equipment has the right-of-way over empty equipment.
- C. Treat unmarked intersections as four-way stop intersections.
- D. Use flagmen to direct traffic at congested work areas.
- E. At South Entrance Road and Plant Road Crossings, traffic from these roads has the right of way. Provide traffic signs, and flagmen at haul road crossings of these roads during borrow area management.

- F. Haul equipment cross of North Entrance Road shall be limited to the hours between 8:00 a.m. and 3:30 p.m. from Monday to Friday.
- G. Supply temporary traffic lights or at least two (2) flagmen at the North Entrance Road when haul equipment is crossing the road.

3.06 BORROW AREA HAUL ROAD

- A. Construct a haul road from the borrow area to the certified area north of the North Entrance Road in accordance with approved design.
- B. Install culverts associated with the borrow area haul and in accordance with Ohio DOT Specifications.
- C. Construct the haul road in such a manner to prevent contact of hauling equipment tires with the uncertified ground surface along the haul route.
- D. Road construction shall be in accordance with Section 02230.
- E. Place geotextile separator under the haul road directly on a ground surface that has not been cleared and grubbed.
- F. Maintain base material stone in such a manner that the haul equipment tires are isolated from the uncertified ground surface.

[END OF SECTION]